

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/561,144
Source: IFwP
Date Processed by STIC: 12/30/05

ENTERED



IFWP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/561,144

DATE: 12/30/2005

TIME: 09:39:19

Input Set : A:\1431sequence_listing.txt
 Output Set: N:\CRF4\12302005\J561144.raw

3 <110> APPLICANT: TAKEDA CHEMICAL INDUSTRIES, LTD.
 4 SHIMOMURA, Iichirou
 6 <120> TITLE OF INVENTION: Novel Protein
 8 <130> FILE REFERENCE: 09653
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/561,144
 C--> 10 <141> CURRENT FILING DATE: 2005-12-16
 10 <150> PRIOR APPLICATION NUMBER: JP 2003-171188
 11 <151> PRIOR FILING DATE: 2003-06-16
 13 <150> PRIOR APPLICATION NUMBER: JP 2003-391047
 14 <151> PRIOR FILING DATE: 2003-11-20
 16 <150> PRIOR APPLICATION NUMBER: JP 2004-23557
 17 <151> PRIOR FILING DATE: 2004-01-30
 19 <150> PRIOR APPLICATION NUMBER: JP 2004-30988
 20 <151> PRIOR FILING DATE: 2004-02-06
 22 <160> NUMBER OF SEQ ID NOS: 25
 24 <170> SOFTWARE: PatentIn version 3.2
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 402
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (1)..(399)
 36 <220> FEATURE:
 37 <221> NAME/KEY: sig_peptide
 38 <222> LOCATION: (1)..(87)
 40 <220> FEATURE:
 41 <221> NAME/KEY: mat_peptide
 42 <222> LOCATION: (88)..(399)
 44 <400> SEQUENCE: 1
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 46 Met Leu Asp Trp Arg Leu Ala Ser Ala His Phe Ile Leu Ala Val Thr
 47 -25 -20 -15
 49 ctg aca ctg tgg agc tca gga aaa gtc ctc tca gta gat gta aca aca 96
 50 Leu Thr Leu Trp Ser Ser Gly Lys Val Leu Ser Val Asp Val Thr Thr
 51 -10 -5 -1 1
 53 aca gag gcc ttt gat tct gga gtc ata gat gtg cag tca aca ccc aca 144
 54 Thr Glu Ala Phe Asp Ser Gly Val Ile Asp Val Gln Ser Thr Pro Thr
 55 5 10 15
 57 gtc agg gaa gag aaa tca gcc act gac ctg aca gca aaa ctc ttg ctt 192
 58 Val Arg Glu Glu Lys Ser Ala Thr Asp Leu Thr Ala Lys Leu Leu Leu
 59 20 25 30 35
 61 ctt gat gaa ttg gtg tcc cta gaa aat gat gtg att gag aca aag 240

P.6

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62 Leu Asp Glu Leu Val Ser Leu Glu Asn Asp Val Ile Glu Thr Lys Lys
63          40          45          50
65 aaa agg agt ttc tct ggt ttt ggg tct ccc ctt gac aga ctc tca gct      288
66 Lys Arg Ser Phe Ser Gly Phe Gly Ser Pro Leu Asp Arg Leu Ser Ala
67          55          60          65
69 ggc tct gta gat cac aaa ggt aaa cag agg aaa gta gta gat cat cca      336
70 Gly Ser Val Asp His Lys Gly Lys Gln Arg Lys Val Val Asp His Pro
71          70          75          80
73 aaa agg cga ttt ggt atc ccc atg gat cgg att ggt aga aac cgg ctt      384
74 Lys Arg Arg Phe Gly Ile Pro Met Asp Arg Ile Gly Arg Asn Arg Leu
75          85          90          95
77 tca aat tcc aga ggc taa                                         402
78 Ser Asn Ser Arg Gly
79 100
82 <210> SEQ ID NO: 2
83 <211> LENGTH: 133
84 <212> TYPE: PRT
85 <213> ORGANISM: Homo sapiens
87 <400> SEQUENCE: 2
89 Met Leu Asp Trp Arg Leu Ala Ser Ala His Phe Ile Leu Ala Val Thr
90          -25          -20          -15
93 Leu Thr Leu Trp Ser Ser Gly Lys Val Leu Ser Val Asp Val Thr Thr
94          -10          -5          -1  1
97 Thr Glu Ala Phe Asp Ser Gly Val Ile Asp Val Gln Ser Thr Pro Thr
98          5           10          15
101 Val Arg Glu Glu Lys Ser Ala Thr Asp Leu Thr Ala Lys Leu Leu Leu
102 20          25          30          35
105 Leu Asp Glu Leu Val Ser Leu Glu Asn Asp Val Ile Glu Thr Lys Lys
106          40          45          50
109 Lys Arg Ser Phe Ser Gly Phe Gly Ser Pro Leu Asp Arg Leu Ser Ala
110          55          60          65
113 Gly Ser Val Asp His Lys Gly Lys Gln Arg Lys Val Val Asp His Pro
114          70          75          80
117 Lys Arg Arg Phe Gly Ile Pro Met Asp Arg Ile Gly Arg Asn Arg Leu
118          85          90          95
121 Ser Asn Ser Arg Gly
122 100
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 393
127 <212> TYPE: DNA
128 <213> ORGANISM: Mus musculus
131 <220> FEATURE:
132 <221> NAME/KEY: CDS
133 <222> LOCATION: (1)..(390)
135 <220> FEATURE:
136 <221> NAME/KEY: sig_peptide
137 <222> LOCATION: (1)..(87)
139 <220> FEATURE:
140 <221> NAME/KEY: mat_peptide

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141 <222> LOCATION: (88)..(390)
143 <400> SEQUENCE: 3
144 atg ctg gac tgg aga ttg gca agt aca cac ttc atc ctg gct atg att      48
145 Met Leu Asp Trp Arg Leu Ala Ser Thr His Phe Ile Leu Ala Met Ile
146      -25          -20          -15
148 gtg atg ctg tgg ggc tca gga aag gca ttc tct gtg gac tta gca tca      96
149 Val Met Leu Trp Gly Ser Gly Lys Ala Phe Ser Val Asp Leu Ala Ser
150      -10          -5           -1   1
152 cag gag ttt gga aca gca agc ttg cag tct cca ccc aca gcc aga gaa      144
153 Gln Glu Phe Gly Thr Ala Ser Leu Gln Ser Pro Pro Thr Ala Arg Glu
154      5            10          15
156 gag aag tca gcc act gag ctt tcg gct aag ctc ctg cgt ctt gat gat      192
157 Glu Lys Ser Ala Thr Glu Leu Ser Ala Lys Leu Leu Arg Leu Asp Asp
158 20            25          30          35
160 ctg gtg tcc tta gag aat gac gta ttt gag acc aag aaa aag aga agc      240
161 Leu Val Ser Leu Glu Asn Asp Val Phe Glu Thr Lys Lys Lys Arg Ser
162      40          45          50
164 ttc tct ggc ttt ggg tct ccc ctt gac aga ctc tca gct ggg tct gta      288
165 Phe Ser Gly Phe Gly Ser Pro Leu Asp Arg Leu Ser Ala Gly Ser Val
166      55          60          65
168 gag cat aga ggg aaa caa agg aaa gca gta gat cat tca aaa aag cgg      336
169 Glu His Arg Gly Lys Gln Arg Lys Ala Val Asp His Ser Lys Lys Arg
170      70          75          80
172 ttt ggt att ccc atg gat cgg att ggt aga aac cgg ctc tcc agt tcc      384
173 Phe Gly Ile Pro Met Asp Arg Ile Gly Arg Asn Arg Leu Ser Ser Ser
174      85          90          95
176 aga ggc tga
177 Arg Gly
178 100
181 <210> SEQ ID NO: 4
182 <211> LENGTH: 130
183 <212> TYPE: PRT
184 <213> ORGANISM: Mus musculus
186 <400> SEQUENCE: 4
188 Met Leu Asp Trp Arg Leu Ala Ser Thr His Phe Ile Leu Ala Met Ile
189      -25          -20          -15
192 Val Met Leu Trp Gly Ser Gly Lys Ala Phe Ser Val Asp Leu Ala Ser
193      -10          -5           -1   1
196 Gln Glu Phe Gly Thr Ala Ser Leu Gln Ser Pro Pro Thr Ala Arg Glu
197      5            10          15
200 Glu Lys Ser Ala Thr Glu Leu Ser Ala Lys Leu Leu Arg Leu Asp Asp
201 20            25          30          35
204 Leu Val Ser Leu Glu Asn Asp Val Phe Glu Thr Lys Lys Lys Arg Ser
205      40          45          50
208 Phe Ser Gly Phe Gly Ser Pro Leu Asp Arg Leu Ser Ala Gly Ser Val
209      55          60          65
212 Glu His Arg Gly Lys Gln Arg Lys Ala Val Asp His Ser Lys Lys Arg
213      70          75          80
216 Phe Gly Ile Pro Met Asp Arg Ile Gly Arg Asn Arg Leu Ser Ser Ser

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217	85	90	95	
220	Arg Gly			
221	100			
224	<210> SEQ ID NO: 5			
225	<211> LENGTH: 19			
226	<212> TYPE: DNA			
227	<213> ORGANISM: Artificial Sequence			
229	<220> FEATURE:			
230	<223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying			
cDNA				
231	derived from mouse soleus muscle.			
233	<400> SEQUENCE: 5			
234	gggggtggac catcctcta		19	
237	<210> SEQ ID NO: 6			
238	<211> LENGTH: 20			
239	<212> TYPE: DNA			
240	<213> ORGANISM: Artificial Sequence			
242	<220> FEATURE:			
243	<223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying			
cDNA				
244	derived from mouse soleus muscle.			
246	<400> SEQUENCE: 6			
247	cgcgcagctg taaacggtag		20	
250	<210> SEQ ID NO: 7			
251	<211> LENGTH: 249			
252	<212> TYPE: DNA			
253	<213> ORGANISM: Mus musculus			
255	<400> SEQUENCE: 7			
256	aggactctaa agttaggagc tctgacttct cacaagatgc tggactggag attggcaagt		60	
258	acacacttca tcctggctat gattgtatg ctgtgggct caggaaaggc attctctgtg		120	
260	gacttagcat cacaggagtt tggAACAGCA agcttgcagt ctccaccac agccagagaa		180	
262	gagaagtcag ccactgagct ttcggctaag ctcctgcgtc ttgatgatct ggtgtcccta		240	
264	gagaatgac		249	
267	<210> SEQ ID NO: 8			
268	<211> LENGTH: 30			
269	<212> TYPE: DNA			
270	<213> ORGANISM: Artificial Sequence			
272	<220> FEATURE:			
273	<223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying			
full				
274	length mouse musculin cDNA.			
276	<400> SEQUENCE: 8			
277	tcctgagccc cacagcatca caatcatagc		30	
280	<210> SEQ ID NO: 9			
281	<211> LENGTH: 19			
282	<212> TYPE: DNA			
283	<213> ORGANISM: Artificial Sequence			
285	<220> FEATURE:			
286	<223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying			
full				
287	length mouse musculin cDNA.			
289	<400> SEQUENCE: 9			
290	ccttgacaga ctctcagct		19	

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Input Set : A:\1431sequence_listing.txt
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293 <210> SEQ ID NO: 10
 294 <211> LENGTH: 1154
 295 <212> TYPE: DNA
 296 <213> ORGANISM: Mus musculus
 298 <400> SEQUENCE: 10

299 gagagagaga	gagagagaga	gagagagaga	gagagtttgttcc	gaaatgttcc	gctaaaaatc	60
301 tggactg	atgttaagaga	aagcaacgac	agggggttgg	gtaagtggag	tagaacttgag	120
303 actataaaaa	cacagaaaaga	aactcgcatc	aggcttaagt	ttgggataag	ctgcaggcag	180
305 gactctaaag	ttaggagctc	tgacttctca	caagatgctg	gactggagat	tggcaagtac	240
307 acacttcattc	ctggctatga	ttgtgtatgt	gtggggctca	ggaaaggcat	tctctgttgg	300
309 ctttagcatca	caggagttt	gaacagcaag	cttgcagtct	ccacccacag	ccagagaaga	360
311 gaagtcagcc	actgagctt	cggctaagct	cctgcgtt	gatgatctgg	tgtcctttaga	420
313 gaatgacgta	tttgagacca	agaaaaaagag	aagcttctct	ggctttgggt	ctccccttga	480
315 cagactctca	gctgggtctg	tagagcata	aggaaacaa	aggaaaggcag	tagatcattc	540
317 aaaaaaagcg	tttggattt	ccatggatcg	gatttgtt	aaccggctct	ccagttccag	600
319 aggctgttgg	atttcttattt	tgcgacttac	tttgtgttgg	tggcacagaa	ctatagaaga	660
321 cacttcagt	aagttcaacta	ccccctttgt	caagaattt	gccttcgca	aacctccca	720
323 aagcttgatc	ctccccagac	catcacgtca	tagtggct	gtggttttag	ttgagttgt	780
325 cagatcattt	cagtgcattt	atatctctga	aagtattttt	aatgatcc	caaattgtaa	840
327 cgtggccct	gaacctactt	tttttaaaca	gcagaccaat	ataatgcatt	ctcttgcatt	900
329 taatattttc	acatttcagt	taatcaatgt	gctttctaga	aacctagtgt	ttgaagatct	960
331 gatgatctaa	agaaatcaga	aatgagcaca	tttgttattt	tatagtttc	tttagttttt	1020
333 ctgagggtt	tcgaattgtt	gtaaaacttca	acttcaagct	tagaaaaaaag	acattacatg	1080
335 agtgggttgc	tcaactgtgt	cagaaggcaa	ataaattttt	agaaacccaaa	aaaaaaaaaa	1140
337 aaaaaaaaaaa	aaaa					1154

340 <210> SEQ ID NO: 11
 341 <211> LENGTH: 28
 342 <212> TYPE: DNA
 343 <213> ORGANISM: Artificial Sequence
 345 <220> FEATURE:
 346 <223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying

full

347 length human musculin cDNA.
 349 <400> SEQUENCE: 11
 350 gactgtgggt gttgactgca catctatg
 353 <210> SEQ ID NO: 12
 354 <211> LENGTH: 28
 355 <212> TYPE: DNA
 356 <213> ORGANISM: Artificial Sequence
 358 <220> FEATURE:
 359 <223> OTHER INFORMATION: Oligonucleotide designed to act as primer for amplifying

full

360 length human musculin cDNA.
 362 <400> SEQUENCE: 12
 363 ctgatcttcc acgagatgtt ggacttgg
 366 <210> SEQ ID NO: 13
 367 <211> LENGTH: 1655
 368 <212> TYPE: DNA
 369 <213> ORGANISM: Homo sapiens
 372 <220> FEATURE:
 373 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/561,144

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Input Set : A:\1431sequence_listing.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 763,965,1032,1033,1043,1075,1080,1113,1138,1235,1238,1265
Seq#:13; N Pos. 1277,1280,1291,1301,1328,1347,1366,1454,1553,1580,1625

VERIFICATION SUMMARY**PATENT APPLICATION: US/10/561,144****DATE: 12/30/2005****TIME: 09:39:20****Input Set : A:\1431sequence_listing.txt
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L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:512 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:720
L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:960
L:522 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1020
L:524 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1080
L:528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1200
L:530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1260
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1320
L:536 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1440
L:538 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1500
L:540 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1560
L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1620